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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,781	03/28/2006	Erik K. Lauritzen	2081-0147PUS1	5507
2292 7590 02/14/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
ELDRED, JOHN W				
ART UNIT		PAPER NUMBER		
3641				
NOTIFICATION DATE		DELIVERY MODE		
02/14/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/573,781

Applicant(s)

LAURITZEN, ERIK K.

Examiner

John Woodrow Eldred

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date 03282006, 06282006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what structural limitation is implied by the term "particle-shaped material". In claim 1, line 5, "each of the particles" has no antecedent basis in the claims. In claims 3-5, the term "preferably" renders the claim indefinite since it is not clear if the limitations following the terms are required limitations.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for pores in the "particle-shaped material", does not reasonably provide enablement for pores within individual particles. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. See page 2, lines 2-5 and page 3, lines 1-3 and 24-25 of the specification for indication that the material has pores, which conflicts with claim 1, line 5, which claims the particles having a pore diameter.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr et al (6,792,843) in view of the admitted prior art on page 4, lines 14-16.

Mohr et al disclose an armor assembly with a multi-ply element comprising a plate shaped ceramic (considered inherently “particle-shaped”, especially in view of the 112 rejection) inner layer 2 and two outer walls 20, 8; where the outer walls can be formed of a metal (i.e. aluminum) or fibers within an elastomeric (see column 3, lines 5-15). Mohr et al fail to disclose the particular claimed parameters of the ceramic material.

Applicant's admitted prior art indicates that the ceramic or “particle-shaped” material is commercially available. Motivation to combine is the mere substitution of known ceramics in order to perform the same basic function while providing a particular desired performance. To employ the teachings of the admitted prior art on the armor of Mohr et al and have a ceramic with the claimed parameters is considered to have been obvious to one having ordinary skill in the art.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mohr et al (6,792,843) in view of the admitted prior art on page 4, lines 14-16, as applied to claims 1-6 above, and further in view of Stevens et al (2002/0152881).

Mohr et al fail to disclose that the “elastomeric” material around the fibers is rubber. Stevens et al teach, see paragraph 24, that “rubber-coated fibers” are used in armor layers. Motivation to combine is the mere substitution of a particular known elastomer for the broadly disclosed elastomeric material. To employ the teachings of Stevens et al on the armor of Mohr et al and have fiber reinforced rubber comprise an outer wall is considered to have been obvious to one having ordinary skill in the art.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ghiorse et al, Palicka et al, and Aghajanian et al are cited as being of interest since they disclose ceramic armors.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Woodrow Eldred whose telephone number is (571)272-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Woodrow Eldred/
Primary Examiner
Art Unit 3641

JWE